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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,967	12/14/2004	Jose Moratalla	MD82/04	3760
7590 Edward P Dutkiewicz 640 Douglas Avenue Dunedin, FL 34698			EXAMINER DELORM, TATIANA M	
			ART UNIT 3744	PAPER NUMBER
			MAIL DATE 06/14/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/517,967

Applicant(s)

MORATALLA, JOSE

Examiner

Tatiana Delorm

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) 15-28 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/14/2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - A. Claims 1- 14, drawn to a desiccant dehumidification system for conditioning air in a structure without employment of a gas fired heater to heat source air, classified in class 62, subclass 271.
  - B. Claims 15-28, drawn to a method of air conditioning in a structure, passing source air through a gas fired heater to heat said source air, classified in class 62, subclass 94.
2. The inventions are distinct, each from the other because of the following reasons:

Inventions A and B are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product. See MPEP § 806.05(h).

In this case, the apparatus as claimed can be used in without a gas fired heater to heat a source air, employing an electrical heater for example.
3. Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions have acquired a separate status in the art in

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view of their different classification, and the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.

4. A telephone call was made to Mr. Edward Dutkeiwicz, counselor for Mr. Jose Moratalla, on May 22, 2007 to request an oral election to the above restriction requirement. During the telephone conversation with Mr. Dutkeiwicz, a provisional election was made without traverse to prosecute the invention of Species A: Claims 1-14.

5. Claims 15-28 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention. Affirmation of this election must be made by applicant in replying to this Office action.

### ***Drawings***

6. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "118" has been used to designate both a surface of the desiccant wheel and a burner. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

7. The disclosure is objected to because of the following informalities:

On page 11, line 10, referral number "11" should be changed to the "111".

Appropriate correction is required.

### ***Claim Objections***

8. **Claim 11 is objected** to because of the following informalities:

Line 1, "claim 5" should be corrected to read "claim 10".

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. **Claims 1-9** are rejected under 35 U.S.C. 102(a) as being anticipated by Yoho et al. (US 5,758,511).

**In regard to Claim 1**, Yoho et al. disclose a desiccant dehumidifier system (Figures 1-9) comprising:

a housing (Fig. 4-5; 260) partitioned into a first and second air chamber (1, 2) each for passing air through; each said air chamber (1, 2) having an inlet for the intake of air (5, 105) and an outlet for exhausting the air (100, 161);

a rotating desiccant wheel (Fig. 4, 50) positioned inside said housing and across said air chambers (1, 2);

an air transmitting means (Fig. 4, 40) positioned within said first air chamber (1) for drawings returning air 95) from a structure into said first air chamber (1) and passing said air across said desiccant wheel (50) to remove moisture from said return air and exhausting into the structure as conditioned air (100);

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an air transmitting means (Fig. 4, 140) positioned within said second air chamber (2) for drawing a source air into said second air chamber (2), across said desiccant wheel (50) to remove moisture from said desiccant wheel (25) and exhausting it (161) from said second air chamber (2);

an air heating means (Fig. 4, 220) positioned in said second air chamber (2) upstream of said desiccant wheel (50) for heating said source air (105) to be passed over said desiccant wheel (50); and

a conduit (Fig. 4, 230) in operational connection between at least one said air transmitting means (140) and said air heating means for passing pressurized air to said air heating means (220).

**In regard to Claim 2**, Yoho et al. teach the conduit (230) is in operational connection between said air transmitting means (40) in said first air chamber and said air heating means (220) for passing pressurized return air to said air heating means (it is understood from Figures 1 and 4 that all parts of the system are in operational connection. Although are in operational connection, it is not direct connection. The system input air 5 passes air transmitting means 40 of the first chamber and further through rotary heat exchanger wheel 60; said heat exchanger (60) operationally exchange the heat with return air passing with other conduit 2a, and mixed air passes through the conduit 230 to the heating means).

**In regard to Claim 3**, Yoho et al. disclose the desiccant dehumidifier system (Fig. 4) wherein said conduit (230) is in operational connection between said air transmitting means (140) in said second air chamber (2) and said air

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heating means (220) for passing pressurized source air (105) to said air heating means.

**In regard to Claim 4,** Yoho et al. disclose the system (Figure 4) wherein said conduit (230) is in operational connection between said air transmitting means (40) in said first air chamber (1) for passing pressurized return to said air heating means (220), and said air transmitting means (140) in said second air chamber (2) and said air heating means (220) for passing pressurized source (105) air to said air heating means (it is understood by the system design that all parts of the system are in operational connection. Although the parts are in operational connection, it is not direct connection).

**In regard to Claim 5,** Yoho et al. disclose a desiccant air cooling system (Figure 4), comprising: an air cooling means (140) for cooling returned air from a structure (105) and recirculating the cooled returned air to the structure (161); and a desiccant dehumidifier system comprising: a housing (260) partitioned into a first (1) and second air chamber (2) each for passing air through, each said air chamber having an inlet for the intake of air (5, 105) and an outlet for exhausting the air (100, 161); a rotating desiccant wheel (50) positioned inside said housing and across said air chambers (1, 2); an air transmitting means (40) positioned within said first air chamber (1) for drawing a portion of said cooled returned air (5) into said first air chamber (1) and passing said cooled returned air across said desiccant wheel (50) to remove moisture from said cooled returned air and exhausting into the structure as conditioned air (100); an air transmitting means (140) positioned within said second air chamber (2) for drawing a source of air



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(105) into said second air chamber, across said desiccant wheel (50) to remove moisture from said desiccant wheel and exhausting from said second air chamber (161); and an air heating means (220) positioned in said second air chamber (2) upstream of said desiccant wheel (50) for heating said source air to be passed over said desiccant wheel (50).

**In regard to Claim 6,** Yoho et al. disclose a conduit (230) is in operational connection between said air transmitting means (140) and said air heating means for passing pressurized air to said air heating means for passing pressurized air to said air heating means (220).

**In regard to Claim 7,** Yoho et al. teach the conduit (230) is in operational connection between said air transmitting means (40) in said first air chamber and said air heating means (220) for passing pressurized return air to said air heating means (it is understood from Figures 1 and 4 that all parts of the system are in operational connection. Although are in operational connection, it is not direct connection. The system input air 5 passes air transmitting means 40 of the first chamber and further through rotary heat exchanger wheel 60; said heat exchanger (60) operationally exchange the heat with return air passing with other conduit 2a, and mixed air passes through the conduit 230 to the heating means).

**In regard to Claim 8,** Yoho et al. teach (Figure 4) said conduit (230) in operational connection between said air transmitting means (140) in said second air chamber (2) and said air heating means (220) for passing pressurized source air to said air heating means (220).

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**In regard to Claim 9**, Yoho et al. disclose the system (Figure 4) wherein said conduit (230) is in operational connection between said air transmitting means (40) in said first air chamber (1) for passing pressurized return to said air heating means (220), and said air transmitting means (140) in said second air chamber (2) and said air heating means (220) for passing pressurized source (105) air to said air heating means (it is understood by the system design that all parts of the system are in operational connection. Although the parts are in operational connection, it is not direct connection).

***Claim Rejections - 35 USC § 103***

**10.** The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**12.** **Claims 10-14 are rejected** under 35 U.S.C. 103(a) as being unpatentable over Yoho et al. (US 5,758,511) in view of Horowitz (US 4, 062,400).

**In regard to Claim 10**, Yoho et al. discloses a desiccant air cooling system (Figure 4, 5): a housing (260) partitioned into a first (1) and second (2) air chamber each for passing air through, each said air chamber having an inlet for the intake of air (25, 115) and an outlet (90) for the exhausting of air (100, 162); a rotating desiccant wheel (50) positioned inside said housing (260) and across said air chambers (1, 2); a cooling means (120) positioned within said first air

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chamber (1); an air transmitting means (40) positioned within said first air chamber (1) for drawing said mixed air (25, 5) into said first air chamber (1) and passing said mixed air across said desiccant wheel (24) to remove moisture from said mixed air (5), across said cooling means (40) and exhausting into the structure as conditioned air (100); an air transmitting means (140) positioned within said second air chamber (2) for drawing a source air into said second air chamber (2), across said desiccant wheel (140) to remove moisture from said desiccant wheel (50) and exhausting from said second air chamber (162); an air transmitting means (140) positioned in said second air chamber (2) upstream of said desiccant wheel (24) for heating said source air to be passed over said desiccant wheel (col. 4, lines 47-52).

However, Yoho et al. do not explicitly teach an air mixing means for mixing returned air from a structure with fresh air to form mixed air.

Horowitz teaches an air mixing means (16) for mixing returned air from a structure with a fresh air.

It would have been obvious to one having ordinary skill in the art at the time of invention was made to modify the system of Yoho et al. with the system taught by Horowitz in order to increase the efficiency of operation of the system by utilizing the principals of natural heat convention.

**In regard to Claim 11**, Yoho et al. disclose the system (Figure 4) further including a conduit (230) in operational connection between at least one air transmitting means (140) and said air heating means (220) for passing pressurized air to said air heating means (162).

**In regard to Claim 12**, Yoho et al. disclose (Figure 4) most of the claim limitations, however he does not teach the conduit (230) is in operational connection between said air transmitting means (40) in said first air chamber (1) and said air heating means (220) for passing pressurized return air to said air heating means (it is understood from Figures 1 and 4 that all parts of the system are in operational connection. Although are in operational connection, it is not direct connection. The system input air 5 passes air transmitting means 40 of the first chamber and further through rotary heat exchanger wheel 60; said heat exchanger (60) operationally exchange the heat with return air passing with other conduit 2a, and mixed air passes through the conduit 230 to the heating means).

**In regard to Claim 13**, Yoho et al. the system (Fig. 4) wherein said conduit (230) is in operational connection between said air transmitting means (140) in said second air chamber (2) and said air heating means (220) for passing pressurized source air to said air heating means.

**In regard to Claim 14**, Yoho et al. disclose the system (Figure 4) wherein said conduit (230) is in operational connection between said air transmitting means (40) in said first air chamber (1) for passing pressurized return to said air heating means (220), and said air transmitting means (140) in said second air chamber (2) and said air heating means (220) for passing pressurized source (105) air to said air heating means (it is understood by the system design that all parts of the system are in operational connection. Although the parts are in operational connection, it is not direct connection).

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### ***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Felber et al. (US 6,328,095) teach a heat recovery ventilator with make-up capability.
- Felber et al (US 6,575,228) teach a ventilating dehumidification system.
- Meckler (US 4,887,438) teaches a desiccant assisted air conditioner.
- Northrup (US 4,180,985) teaches an air conditioning system with regeneratable descant bed.
- Tryon (US 2,917,287) teaches a heating and/or cooling system.
- Dufour et al. (US 3,744,374) teach a heating section with a burner in flame.

### ***Contact Information***

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tatiana Delorm whose telephone number is 571-272-3421. The examiner can normally be reached on Monday through Friday from 9:00 am to 6:00 pm.

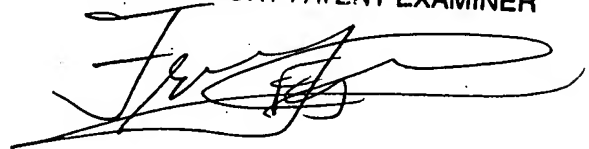
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on 571-272-4834, or Frantz Jules at 571-272-6681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TMD

FRANTZ JULES  
SUPERVISORY PATENT EXAMINER

A handwritten signature in black ink, appearing to read 'Frantz', is written over a horizontal line. The signature is stylized with a large, sweeping 'F' and a cursive 'r'.